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THE TEAMING OF PRINCIPALS PROJECT, A REPORT TO THE FUND FOR
THE ADVANCEMENT OF EDUCATION.

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DESCRIPTORS- *PRINCIPALS, *ELEMENTARY SCHOOLS, SCHOOL
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THE CASE STUDY TECHNIQUE WAS USED TO RECORD AND ANALYZE
THE FUNCTION AND EFFECT OF A FIVE-MAN ELEMENTARY PRINCIPAL
TEAM OPERATION OF FIVE SCHOOLS. EACH TEAM MEMBER SHARED THE
VESTED RESPONSIBILITY, ADMINISTRATION, AND INSTRUCTIONAL
TASKS OF EACH SCHOOL BY PARTICIPATING IN GROUP PLANNING
SESSIONS TO MAKE DECISIONS CONCERNING PROBLEMS IN THE FIVE
SCHOOLS, AND BY ASSUMING RESPONSIBILITY FOR ONE OR MORE AREAS
OF THE CURRICULUM IN ALL FIVE SCHOOLS. TESTS AND
QUESTIONNAIRES USED TO VERIFY FINDINGS INCLUDED (1)
LEADERSHIP BEHAVIOR DESCRIPTION QUESTIONNAIRE, (2)
HOLLINGSHEAD TWO-FACTOR INDEX OF SOCIAL POSITION, (3) GOUGH'S
ADJECTIVE CHECKLIST, (4) TEACHER QUESTIONNAIRE, (5) PUPIL
ACHIEVEMENT, AND (6) ATTITUDE SCORES. RESULTS SHOWED (1) THE
TEAM MEMBERS WERE ABLE TO WORK EFFICIENTLY AND EFFECTIVELY
TOGETHER TO ACCOMPLISH THE ADMINISTRATIVE ACTS REQUIRED IN
THE SCHOOL AND THE DISTRICT, (2) TEAM MEMBERS REALIZED A NEED
FOR FURTHER, MORE SPECIALIZED TRAINING IN CURRICULUM,
SUPERVISION, AND GROUP INTERACTION, (3) SLIGHTLY HIGHER
INTEREST AND ACHIEVEMENT SCORES FROM THE CHILDREN AND MORE
POSITIVE ATTITUDES FROM THE TEACHERS WERE OBTAINED IN THE
TEAM-ADMINISTERED SCHOOLS THAN IN THE OTHER SCHOOLS IN THE
DISTRICT, (4) THE STIMULATION AND INTERACTION WITH OTHER TEAM
MEMBERS RESULTED IN MORE DECISIONS, (5) TEACHERS EXPRESSED
CONCERN FOR NOT BEING INVOLVED IN THE DECISION-MAKING PROCESS
IN EACH SCHOOL, AND (6) THE TEAM FAILED TO PROVIDE FOR
SYSTEMATIC STAFF EVALUATION. (JB)

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Palo Alto Unified School District
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**PALO ALTO UNIFIED SCHOOL DISTRICT
PALO ALTO, CALIFORNIA**

CONTENTS

	Page
Acknowledgments	iii
Introduction	1
The Implementation and Early Phase	11
The First Academic Year	15
The Second Academic Year	27
Summary and Recommendations	65
Appendix	71
References	73

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INTRODUCTION

Three years ago the Teaming of Principals plan was first proposed in the Palo Alto School District (Anastasiow and Fischler, 1964). The project developed out of discussions about the dilemma which elementary principals faced — that of having administrative as well as instructional leadership responsibilities. It was noted that most elementary principals were spending a major portion of their time on these activities and were not assuming the instructional responsibilities as fully as they, their teachers, or the central staff administration desired. It appeared that if the principal was successful as an instructional leader, he found that the amount of time necessary to consult with and act as a teacher of teachers seriously interfered with the time necessary for administrative tasks. Yet, if he spent time on administrative tasks and operated a well-run school, he received little credit and frequently was criticized for not serving in an instructional capacity. It was our observation that insufficient time was given to the systematic observation of teachers and the improvement of instruction. Not only did we feel that the role of instructional leadership was not being performed adequately, but we anticipated that new problems facing the school would need immediate and serious attention. We had hoped, through the Teaming of Principals plan, to explore possible solutions to this dilemma of the principals' role, as well as to assist principals in developing ways of dealing with the larger pressures which teachers and principals are facing in the accelerating change in our society and its impact on the schools.

The larger problems facing schools today fall into at least five categories:

1. The explosion of knowledge which has taken place has provided schools with a great deal of new information and requires updating of textbooks and the methods of those who teach.
2. New content has been added to the curriculum and the impact of these new courses being taught for the first time (i.e., foreign language mandated by the legislature for all sixth grade pupils in the State of California) requires all who teach to become trained in those areas.
3. New teaching devices (i.e., TV and soon-to-come computer-based instruction) are adding to the classroom instruments of great potential, but are being placed with teachers untrained in their use.
4. Subject matter has been reorganized (i.e., science and mathematics, social studies, and linguistically organized language arts program) requiring new techniques of teaching and understanding of the content.
5. School personnel has been reorganized (i.e., non-graded schools, team teaching, cooperative teaching, specialized teachers), creating a need for teachers who are innovative and open to new ways of specializing.

In addition to these changes, ideas on how best to teach are being explored by a number of authors. In his recent book, Bruner (1966) discusses the multivariate problem of developing a theory of teaching. He places heavy emphasis on inquiry and discovery techniques. Gage (1963), in his handbook, summarizes much that is new to teachers, leaving many research questions unresolved. It would seem that even the teaching-learning process is in a state of flux. In addition, fresh insights and information are being added about the growth and development of a child. Different learning theories are beginning to emerge, such as those proposed by Professors Piaget (Flavell, 1963), Gagne (1965), Sears (1957), and Ausobel (1961). Each will bring new procedures to teaching and new innovations for trial and experimentation.

There appears to be a thread tying all of these problems together, i.e., the problem of re-educating teachers and administrators to be able to adjust and put into practice the changes which are taking place — and maintain equilibrium when there are pulls from within and without the profession.

The key person in our model for the resolution of these new impacts, as well as for the implementation of educational change, is the elementary principal who is the administrator and instructional leader of his school. Our project attempts to study his role and assist him in operationalizing practices for improving instruction. We believe he is and should be the primary person responsible for all instruction that takes place in his building; and if instructional improvement is to occur, then it will be the principal who initiates, encourages and takes responsibility for its occurrence, rather than other personnel, such as consultants and supervisors, hired to assist teachers. We see the major responsibility being assigned to the principal for assisting teachers in making the necessary improvements in their programs for excellence to be attained.

To do this effectively, the principal must overcome a resistance to change. Most human beings tend to resist change, and elementary principals are no exception. Since they are under heavy pressure from teachers, parents, and higher administrative authorities, they appear to be rather conservative. They seem to desire to maintain a smooth-running educational organization. Change, especially educational change, usually involves some anxiety and turbulence, and therefore usually is resisted, as it will be by teachers as well as by principals. However, the problem is greater than merely being ready to accept change. To be able to implement the innovations necessary for educational improvement, the elementary principal needs a broad grasp of subject matter in all areas of the curriculum taught in grades K through 6, as well as an understanding of how children learn. He needs also to be aware of

the nature and rationale of change in content and teaching methods so that he can help teachers understand and implement new courses of study. In addition, he must be skilled in the area of observation so that he can recognize teaching patterns being utilized by his teachers. He must be able to relate these patterns to pupil behaviors and to the objectives being sought. He must be able to analyze the strengths of each member of his staff in order to maximize these strengths, thereby minimizing weaknesses. All of this he must do himself — observing, gathering data and forming hypotheses about the teaching and teachers in his school. He does not have the benefit of validation of practices that he is able to give his teachers. At the same time, he must continue to administer the school smoothly, handling parental and pupil problems, as well as those of teachers. He must do this efficiently, for if the administrative tasks of the school are not performed, the organization would collapse. The schools can function, however poorly, without an instructional leader because teachers are professionally trained. We would hold that the school cannot function without an administrative leader, and the demands of these tasks are great enough to trap the most energetic elementary principal. Yet the changes occurring in the schools will require the principal to perform at an even greater efficiency his instructional leadership role.

Before going further, it is necessary to differentiate between the roles of the elementary and secondary school principals. Because secondary schools are usually larger, there is a division of responsibility. In most secondary schools, the principal delegates his instructional leadership role to curriculum associates or department chairmen. He depends on these individuals for knowledge in their disciplines as well as for the observation of teachers in their departments. He can function as a manager by utilizing these people as a policy-making

group. The elementary principal, on the other hand, operates in relative isolation. As Huberman (1964, p. 24) has written:

"Few leadership roles in our society carry as much responsibility and place an individual so completely alone as the office of school principal. Without a peer group he must still work with others; without colleagues sharing the same responsibilities, he must listen to the problems of others but forego the luxury of spilling his own."

In part, it is the professional aloneness and isolation from his peers that generated the plan to team elementary principals.

The Concept of a Team of Principals

Applying the rationale behind team teaching, we proposed that a number of problems inherent in elementary school administration could be alleviated by teaming principals.

The definition of team teaching we used (Shaplin, 1964) follows:

"Team teaching is a type of instructional organization, involving teaching personnel and the students assigned to them, in which two or more teachers are given responsibility for working together for all or the significant part of the instruction of the same group of pupils. In addition, there is a willingness on the part of the teaching personnel to have their teaching behavior observed and analyzed by their peers in relation to agreed upon objectives."

In developing a definition for teaming of principals, we have taken the liberty of changing this definition as follows:

"Teaming of principals is a type of organization, involving principals and teachers assigned to them, in which two or more principals are given the responsibility for working together for all or a significant part of the time allocated to supervisory and leadership responsibilities."

In addition, there is a willingness on the part of the principals to have their supervisory and leadership role studied and analyzed by their peers in relation to agreed upon objectives."

The type of organization proposed in this definition is a formal organization within a school district. It is not an agreement into which the principal enters with a colleague, but an organization recognized by the central administration as a means of implementing more fully the roles of the principal. The insertion of the words "principals" and "teachers" into the definition indicates our belief that all principals should be primarily concerned with the supervisory and leadership role related to the instructional program in their schools. In this plan, principals are given responsibility for all the teachers in all of the buildings involved in the team. Thus, a team of principals shares the responsibility for the same group of teachers in much the same way as a group of teachers shares responsibility for the same group of children.

The phrase, "working together," in the definition signifies a close relationship among the principals for the purpose of planning instruction as well as for providing leadership to the teachers in the various areas of the curriculum.

Anastasiow (1963) has shown that teachers who have worked on a team state that the experience is professionally stimulating, and that the interaction with peers who understand and share similar problems is of great value. This project attempts to achieve similar results with elementary principals.

A team of five elementary principals was proposed, with each of four members specializing in a major area of the curriculum taught in the elementary schools, while the fifth assumed some administrative responsibilities in all five schools.

For this project the central administration was not to play an important part regarding the input to the teachers in the team schools. The major responsibility for instructional leadership would rest with the principals. The team would call on the services of members of the central staff only in conjunction with their own efforts and only in the manner decided upon by the team.

This plan is based upon the following assumptions:

1. The principal may specialize in greater depth in one or two areas of the curriculum and offer these competencies to teachers in more than one school. He gives leadership in his areas of strength and gains support from other principals in his weaker areas.
2. The principal would be released from attending many in-service meetings, but would be kept informed by the other team members who do attend.
3. He could share his subject matter competencies with other principals by helping them identify teaching excellence. He would not attempt to keep abreast in the new developments in all fields himself. However, each principal would become more knowledgeable than he was before in curriculum areas as a result of interacting with his peers through the communication network of the team. Thus, the team resembles a small "school of education," with each principal knowledgeable about the field of education, but specializing in one or two areas of the curriculum in greater depth. He remains a generalist, however, in that he holds responsibility for instructional improvement for each teacher's total program. Thus, he may avoid over-emphasizing his specialty with teachers at the expense of other areas of the curriculum. However, we believe that good teaching in one area is related to good teaching in other curriculum areas. Thus, the results of improved instruction in one area should hopefully transfer and generalize to the teachers' total program. Each team principal, then, would assist teachers in one or two areas, helping teachers maintain a balance in curriculum emphasis and assisting teachers in identifying how the technique of good teaching applies to other areas of the total classroom program.

It is hoped that by sharing administrative responsibilities the principal would be released to spend more time with teachers and children. Since not all principals would attend the same meetings, more time would be available for them to visit teachers and work with them for the improvement of instruction. In addition, we felt that sharing administrative responsibilities would result in greater efficiency in the performance of administrative tasks. Our original proposal indicated that principals were usually selected for classroom teaching excellence, not administrative ability. We indicated that increased administrative efficiency would provide each principal with more time for instructional tasks.

Our utilization of the term, "team," needs some explanation, for we have used the term, "team," instead of "small group," in much the same way as Klaus and Glaser (1960). They distinguish "team" from "small group" in the following way:

"Teams, on the one hand, are usually well organized, highly structured, and have relatively formal operating procedures — as exemplified by a baseball team, an aircraft crew, or a ship control team."

"Small groups, on the other hand, are rarely so formal or have as well-defined specialized tasks — as exemplified by a jury, a board of trustees, or a personnel evaluation board."

Our plan clearly does not fall into their definition of a "team"; yet, it is more formal and more goal-oriented than the concept of a small group. However, we perceive that this organization which we have proposed is similar enough to the notion of small group theory that the literature available would aid in the analysis of our results.

Therefore, as we studied the plan and mode of operation of the teaming of principals project, we have used Bruce Tuckman's (1965)

proposed four stages for the cohesive development of a group. His stages are as follows:

- "1. testing and dependence
2. intra-group conflict
3. development of group cohesion
4. functional role relatedness"

Testing and dependence refers to the period of time necessary for the members to orient themselves to the task. The members attempt to lay down the parameters and the manner in which the group members will work. We can refer to this stage as "setting the ground rules."

The second stage is characterized by emotional conflict — the group may be polarized — based on the movement toward the unknown. Conflict may arise toward central administration or towards someone outside the group. There is some resistance to the specified tasks by members of the group.

The third stage is the willingness of members to accept the group as a whole as well as individually. At this stage the team emerges as an entity. Task conflicts are minimized and the harmony for the sake of the group is sought.

The fourth stage is the functional one. Now the team becomes a problem-solving instrument. Its members become objects, and each member is secure within the group. At this particular stage, the group becomes productive.

The Project

This study is an attempt to analyze the role of the principal, with recommendations for the operation of his role, and to develop guidelines of effective practices in administration and instruction.

For the past two-and-a-half years, five principals have been meeting on a regular basis to plan and implement the team approach. The principals were selected for their varying backgrounds in subject matter: thus, one had a strong background in science, another in mathematics, a third in foreign language, a fourth in language arts, and the last in reading and social studies. All were principals of K-6 elementary schools of approximately the same size.

Three conditions were necessary for the implementation of this plan:

1. Each principal was to share the responsibility and authority vested in him for the administrative and instructional tasks of the school. In addition, he assumed responsibility and authority in the other elementary schools.
2. Each principal was to participate in group planning sessions at which time decisions would be made about various problems in the five schools.
3. Each principal was to assume major responsibility for one or more areas of the curriculum.

This study can be looked upon as a case history. Detailed records were kept by a research assistant for the first year-and-a-half. A portion of these results are contained in an unpublished doctoral dissertation (Miller, 1965). In addition, minutes of the team meetings were analyzed by the project directors and research assistants.

Additional data in the form of the Leadership Behavior Description Questionnaire (1957), Hollingshead Two Factor Index of Social Position (1957), Gough's Adjective Check List (1960), A Teacher Questionnaire, children's achievement data and attitude data were collected. A structured interview was administered to each participating principal and a random sample of teachers in the team schools. From these data the following results were obtained.

THE IMPLEMENTATION AND EARLY PHASE

January 1964 — August 1964

Each individual contacted to be a potential member of the team was selected because of his recognized competency in a subject area, as well as his over-all ability as an elementary principal. The superintendent approved the project directors' nomination of potential team members, who were then contacted individually and given a full description of the plan and requirements for participation as listed above. Each candidate discussed the possibilities and potential problems in implementing the plan and raised questions about his participation. Each was asked to react to the suggested list of potential members. The team was composed of volunteers who were nominated and then given the opportunity to decline. Only one candidate chose not to participate. Thus, the actual team was composed of individuals who freely chose to be members. It was not considered essential that the potential team members have a close personal feeling toward the other members of the team, but it was felt that the project could not operate unless there was a basis of mutual respect among the team participants based upon their professional competencies. This notion has been supported by the actual operation of the team. The mutual respect among the five team members for each other's competencies has grown during the period in which they have functioned as a team, and there is general consensus that this is a critical element in a team operation.

During the initial stage the project directors met with the team on a weekly basis, discussing its operation as well as purposes and goals. The project directors decided that the members who composed the team should decide on operational procedures, problems to be discussed,

allocation of their specialties and ways and time to work with the staffs of the five schools. The project directors met with the team until it was evident that team members fully understood the intent of the project and were willing to meet the conditions set forth in the proposal. The first six months were then spent in planning. The implementation of the actual operation of the team plan was scheduled to be put into effect in the beginning of the school year in September (1964).

Testing and Dependence

During these first six months the major problems discussed revolved around the issue of shared responsibility and authority. It was difficult for some of the team members to release the authority for their "home" school. Many questions were raised and discussed about this issue. Two principals seriously questioned whether parents would accept another principal making a decision about a child in other than his home school and whether teachers would accept a decision made by a team principal other than their own. Consequently, the question of whether it was necessary to maintain the image of the principal in one school was discussed at length. This basic issue is frequently raised by those inquiring about the team. The team plan challenges the necessity for teachers, parents, and children to identify with one individual, the principal, as the clear authority in the school. The project is based upon the assumption that the team operation would not damage the image of the principal, but rather enhance it. Our evidence, reported more fully below, indicates that this has been the case.

Intra-Group Conflict

During these first six months, one of the team principals emerged as a "task leader" and pushed the others towards fully implementing the plan. He continuously brought the discussions back to the central issue

of shared authority and responsibility. It is clearly evident in the minutes that the team members had no difficulty with the concept of assuming more responsibility in the areas of curriculum and administrative decision in other than their own school, but, for the most part, they were reluctant to delegate some of their own authority.

Development of Group Cohesion

This early defensiveness gave way through the repeated discussions of the issues, and a strong sense of cohesiveness developed by the end of the six-month period. This sense still persists and has been reinforced as the benefits to the team members have accrued. This will be discussed more fully below in the Summary section.

Functional Role Relatedness

Through this period another team member developed into a maintenance leader. He functioned in such a way as to reduce threat and to help others compromise their differences within the group.

This initial period served as the time when plans were laid for the full implementation of the project. Teachers' meetings were held where the team was introduced and goals of the plan were outlined. The reception was excellent in most schools, with only individual teachers somewhat hesitant about the idea of five principals supervising their school.

The team planned its first year of operation as one in which members would largely be available to each other, validating their practices and discussing administrative and curriculum problems. This plan was in essence the one that was put into operation.

Data was collected at this time in each of the team schools concerning the principal's concept of himself, the climate of the school, and the teachers' and central staff's perceptions of the principal. These same

data were collected again at the end of the two-and-a-half year period and will be reported more fully below.

The six months prior to the initiation of the project had a positive effect on the total project. It appears that the principals of the team schools moved through the four stages developed by Tuckman. This may be partial support for his model. Many non-team principals attending central staff meetings in the district usually listen, even participate in them, by nodding; however, we note few behavioral changes take place when they return to their schools. They operate very much as they did before. There appears to be no commitment to change on the part of these principals. The first six months gave the team principals an opportunity to develop a commitment, mutual respect, and lines of communication — all of which served to make it possible for teaming to begin once September, 1964, arrived.

THE FIRST ACADEMIC YEAR

September 1964 - June 1965

Further Training

Following the initial discussions it became clear to the principals that they would need further academic work in order to be true curriculum specialists. This serendipitous finding is of major importance to our study. We now perceive two major categories of elementary principals. One is made up of those who are career oriented, moving up towards other kinds of jobs in education, such as assistant superintendents, curriculum directors, or university professors. Most members of this group take further training, usually in education. The second group we define as specific job oriented principals who want to maintain the job they have now and are not motivated to further academic work. They feel they have their credentials and have finished their professional academic training. They may be involved in in-service activities, but, in general, they assume they have their specialization and do not systematically pursue their area of interest further. Their reading is limited to a few popular journals, and their professional lives revolve around their individual schools. This project brought this dichotomy to light for the team principals, and developed a new image for them - elementary principals who would pursue academic work in order to be better able to do the job they hold now.

One principal attended the summer session at the University of Guadalajara, completing nine graduate units in Spanish language and history, even though he holds his doctorate and the units will serve no professional salary advancement.

A second attended a special two-week workshop on leadership training and completed an equivalent of six units of individual study in language arts.

A third assumed major responsibility in the AAAS Science development program, attending weekly seminars for a year. He wrote and taught science units during the summer on a demonstration basis.

A fourth completed work on her dissertation at Stanford University, dealing with achievement of elementary school children.

The fifth took university courses in mathematics and music, equivalent to six units.

Thus, each team principal received further training which brought him up to date in his area of specialty.

This point was clearly demonstrated to the team the following year when, due to illness, one of the original members of the team resigned from the school district. The training of all four of the remaining principals continued during the second summer in advanced work at various universities. A replacement for this member was selected by the team the following fall (1965). This member has not yet attended college courses in his specialty. He has noticed that work in his curriculum area has demonstrated some difficulties in that his present understanding of his specialty is not as current as the knowledge of other team members in the academic areas. At this writing he is enrolling in summer work in reading with a national authority. To the project directors the growth these principals have made in this area alone is well worth the plan.

Administrative Decisions

A second major effect found in this project was the benefit received by team principals through the stimulation and interchange of ideas during team meetings. Each principal feels this was by far the most pronounced gain for them. They were isolated no longer from their peers, and now had available to them a person to validate their practices and with whom they could try out new ideas. These results are consistent with findings in our teaming of teacher projects (Anastasiow, 1962, 1963; Fischler and Shoresman, 1962).

The next major gain in the first year was in administrative areas, although it was originally hoped that team principals would be more involved in curriculum areas through this project. With the benefit of hindsight we note that this is not inconsistent with our rationale because it was postulated that the elementary principal is frequently not sufficiently trained nor experienced in the art of administration. Further, we find that one of the major problems of the elementary principal has been that although he makes administrative decisions, it is frequently his practice to reconsider decisions that were made in the past. He treats reconsidered decisions as he would new ones and thus loses time that could be spent in resolving new problems or working in instructional areas. We feel one of the major reasons he reconsiders so many administrative decisions is that he has not had them validated by another administrator at a peer or super-ordinate position. That is, no one confirms the fact that his decision was a good one. Thus, part of what we perceived to be administrative inefficiency lies in the principal's lack of knowledge and experience in administration and in lack of validation of his practices. The two problems together seem to cause the principal to reconsider old problems. For example, whether to allow parents to drive private cars on field trips and transport children is reviewed annually by some principals. Our team members made a decision,

regardless of the pressure, for substitute modes of transporting children. They felt that the risk in using parent drivers was too great. Consequently, public transportation buses are rented to supplement the minimal services provided by school buses. The decision, once made, was adhered to by the team principals and has not been reconsidered by them. This, we note, has been true of other decisions made by these principals.

Over fifty separate administrative decisions were identified during this first year. These were discussed and solutions were decided upon. They ranged from yard duty schedules, scheduling the service personnel, to establishment of a common budget for supplies and teaching aids. The following is a condensed list of activities covered during this period.

1. Investigated legal requirements for cumulative records
2. Clarified the rights of separated and divorced parents concerning the custody of children through getting opinions both at the school district and the county counsel levels
3. Obtained a legal opinion for a principal regarding a case in which a child refused to stand and salute the flag
4. Gained clarification of the district policy concerning the liability of parents who transport youngsters in private cars during school hours and possible parent liability growing out of accidents in which parents were officially supervising children in school buses
5. Provided information to the team concerning professional liability insurance for professional educators
6. Made arrangements for the installation of additional telephone facilities in each of the five schools
7. Coordinated the revision of forms filled out by substitute and regular teachers, enabling team principals to get a more accurate impression of the capabilities of various substitutes and the preparation that regular teachers provided for their absence from school
8. Made arrangements with the business office to handle all finances regarding the attendance of the team at conventions

9. Coordinated the correction of primary achievement tests by all of the clerical assistants in the five schools
10. Arranged for the inventory and purchase of maps and globes for all team schools
11. Consolidated purchase orders for the team
12. Arranged with the business office to place a reproduction machine in one of the five team schools to be shared by all
13. Coordinated the inventory of all professional magazines and professional libraries in the team complex
14. Provided the team with information on income tax deductions growing out of attendance at various summer workshops and classes taken at colleges and universities
15. Drafted the team's recommendations regarding the learning assistance program and sent the letter to the assistant superintendent
16. Consolidated the team's written and personal contacts with the central administration
17. Arranged with the personnel office an interview schedule for the team regarding prospective teachers
18. Clarified the organization and coordination of special education programs and investigated the most efficient channels of communication through which information about the progress in these programs can travel to the central level
19. Planned a summer conference on "Learning and Learning Theory" calling upon team members' assistance as specialists
20. Clarified the procedural routines of clerical staff. It was also established that the trend toward increasing the workload of the office staff members was not desirable. Interviews for openings were scheduled.
21. Outlined and submitted team budget to the business manager

This interaction and decision making has had a very positive effect on the team members. It has helped them feel that they were accomplishing goals and were resolving unsolved problems. In addition, it released them to attend to curriculum problems discussed below.

An example of the team staff becoming a "team" can be inferred from an observation of all members attending the California ASCD meeting in Bakersfield. When four principals arrived, they registered as a "team" and spent several hours discussing the implications of the sessions each had attended during the day. They also planned a schedule of attendance at each day's sessions. No two principals attended the same session, yet all were able to profit from the discussions which took place in the evenings.

The positive effects of the team's actions had a ripple effect on the district. The central administration found that these men had become leaders in staff meetings of the total district elementary principals. Generally, they had discussed the issues before attending these meetings and were in a position to make sound policy recommendations. This action had two major effects on the team. One, members began to be called upon to serve on major administrative and curriculum committees. Their views were frequently instrumental in influencing decisions made by the superintendent's cabinet. Two, the power inherent in the team's carefully thought-through position was viewed with alarm by other principals, and some envy and hostility towards the team ensued. Team members had to watch their participation in district meetings carefully so as not to give the impression of dominating the total elementary principals' group decision making. The excitement engendered among team members is contagious, but at times misunderstood by those who do not participate. Care must be taken by team members to establish friendly relations with the larger principal group.

Another general influence of this project grew out of the positive effects on the total school district. The superintendent reorganized all elementary and secondary schools into complexes that were to meet together to discuss common problems. This was a skeleton outline of the team plan and does not work as well as the team, due to the fact

that authority and responsibility lines are not clearly defined nor discussed. In addition, the members assigned to the complex must have a commitment to each other and to the goals established by the group. At this time, the complex members are only members of a staff. They must be given time to become a group and, ultimately, a team. Mutual respect for each other must be earned.

Curriculum Decisions

Although fewer decisions were made in the area of curriculum during the first year, important action was taken by the team. Each team member was selected as a committee chairman for the district's curriculum committees. Thus, they were influential in making total district curriculum decisions.

In addition, serious attention was given to curriculum problems within their schools. The following is a list of specific actions taken by the team.

1. Language Arts

- a. Maintained liaison with the language arts committee
- b. Attended a language arts convention
- c. Reviewed and made recommendations for the language arts aspect of an ungraded primary program being initiated at one of the team schools
- d. Collected various resources which were requested by team members and teachers

2. Foreign Language

- a. Maintained liaison with the foreign language committee
- b. Consulted with a team school that was experiencing a problem with a large number of foreign students who could not speak English

- c. Evaluated and made recommendations, on behalf of the team, concerning the purchase of foreign language tapes and records for the district
- d. Consulted with a team school engaged in several foreign languages in their school program

3. Physical Education

- a. Maintained liaison with the physical education committee
- b. Represented the team at a conference on the California physical fitness program
- c. Coordinated the evaluation and made recommendations for the purchase and placement of playground equipment for the five team schools
- d. Consulted with teachers and principals on the physical education programs at several of the team schools
- e. Collected various resource materials that have been requested
- f. Consulted with a team school on the establishment of a noon activity program

4. Music

- a. Maintained liaison with the music committee
- b. Evaluated and made recommendations for the team on district educational television and video tapes in the field of music
- c. Coordinated and evaluated the instrumental and vocal specialists in the team schools
- d. Provided a music appreciation program for the five schools involving a string quartet from one of the district's high schools
- e. Consulted with classroom teachers on their vocal music program
- f. Coordinated and supervised attendance of children from the team schools at the professional opera performance
- g. Arranged for regular consultation schedules for teachers at each team school

- h. Provided demonstration lessons for groups of and individual teachers
- i. Prepared for an evaluation of the instrumental music program. However, they decided not to implement the evaluation until official notice came from the central office that it was to be done

5. Mathematics

- a. Maintained liaison with the mathematics committee
- b. Consulted with individual schools and teachers on grouping for SMSG math
- c. Made recommendations and provided special materials for accelerated and remedial students
- d. Planned and conducted math conferences and demonstrations
- e. Arranged for regular consultation schedules for teachers at each team school
- f. Provided demonstration lessons for groups of individual teachers

6. Science

- a. Maintained liaison with the science committee
- b. Participated in the American Association for the Advancement of Science program involving primarily teachers from team schools
- c. Taught an extension course in elementary school science in one of the team schools, attracting several of the team school teachers
- d. Consulted with a number of individual teachers
- e. Arranged for a regular consultation schedule for teachers at each team school
- f. Assessed the existing science equipment at several of the team schools in order to make recommendations for future purchases
- g. Provided demonstration lessons for individual teachers

7. Art

- a. Maintained liaison with the art committee

8. Reading

- a. Maintained liaison with the reading committee
- b. Consulted with individual teachers who had specific problems in planning reading programs in their classrooms
- c. Investigated and purchased a series of reading diagnostic tests which were circulated throughout the team schools
- d. Procured and circulated SRA orientation materials for teachers in each of the team schools
- e. Asked specialists in reading from the central office to serve as special consultants until the end of the year

9. Social Studies

- a. Maintained liaison with the social studies committee
- b. Consulted with individual teachers concerning problems in social studies
- c. Consulted with teachers to adapt existing social studies units to a non-graded program in the upper grades
- d. Asked specialists in social studies from the central office to serve as special consultants until the end of the year

During the first year, steps were taken by the team principals to begin work with teachers in buildings other than their own. Most of the activity was limited to two curriculum areas — math and science. Science was a major area due to the participation of the principal in the AAAS Science national study. Eight teachers in the various team schools were involved in the national study and met on a regular basis with the team principal. In addition, workshops and teacher meetings were held in the team schools for the faculties.

In the area of math, the team's efforts became generalized across the entire district. The team principal whose specialty was mathematics

was in charge of a total district two-week math conference held prior to the opening of school. Many teachers in the team schools attended this workshop. Math experts from local colleges and universities were involved in the instruction. This principal held follow-up meetings with teachers in the team schools through grade level and faculty meetings.

The principal whose specialty was foreign language held group meetings with teachers in the team schools, discussing the local problem of educating foreign students whose parents are associated with Stanford University. These pupils often can read or write their native language, but not English. This poses a unique problem for two of the team schools and some tentative solutions evolved from the endeavors of the principal with foreign language specialization.

Teachers

In general, the team's efforts were directed towards groups of teachers, and little individual work was undertaken in the actual classroom. However, classroom demonstrations and workshops were held by the principal responsible for math and music in buildings other than his own. This, in itself, is a unique contribution as our observations show that few other principals in our district provide demonstration lessons for their teachers.

Interviews were held with five teachers from each school who were selected randomly. These results indicate that, in general, the teachers were pleased with the team concept. However, they were concerned about the amount of time their principal was away from his building and their own lack of involvement in contributing ideas to the actual operation of the team. As a result of this data, the principals charted the amount of time they were out of their building for team concerns and the amount of time they were involved in total district concerns. It was

found that they were using the greater part of their time for the district at large, and this was reported back to the teachers.

The team also decided that, for the first year at least, they would encourage the teachers to ask for help rather than initiate it themselves. This appears to have been an excellent choice, and many of the team principals' contacts with teachers came as a result of teacher initiative.

The project directors met with each team staff and gave them an opportunity to raise questions and express their feelings about the team. The lack of teacher involvement in the operation of the team was discussed at length. It was felt that the teachers expected a great deal more immediate positive effects than could be solved within any one project. It is our contention that the excitement that accompanies innovation may raise hopes higher than are reasonable. The Claremont Team Teaching Project Report presents similar data. They describe the excitement of the teachers reaches a peak by January or February of the first year, at which time there is a sharp drop. Enthusiasm then rises, but never to the peak point, and never falls as low as attitudes were before the project started. Our findings can be viewed similarly. There is evidence reported below that the following year a positive view was maintained by the teachers which, in our judgment, was much more realistic.

THE SECOND ACADEMIC YEAR

June 1965 — June 1966

The summer following the first full year of operation, the team principals continued their advanced academic work. Additional courses were taken in administration, language arts, science, and foreign language. In addition, the principal whose specialty was foreign language continued his study with individual tutoring sessions in Russian throughout the first semester of the school year.

One of the team's major contributions to the district was that of planning a summer conference dealing with principles of learning and an application of Bloom's taxonomy to an operational level in the classroom. Madeline Hunter of UCLA was the major speaker, and one of the team principals served as coordinator and director of the conference. One hundred and forty-three teachers attended, many of them from the team schools. This project is described more fully in Hunter and Dohemann (1966). Not only did the total team of principals add significantly to this project by their planning, but one principal served as conference director and two of the team principals as discussion leaders.

Prior to the conference the team principal who served as conference director and his entire staff attended a two-week conference at UCLA, working on learning procedures and plans for an ungraded school. This group has developed curriculum materials which sequence the skill development of pupils from kindergarten through third grade in reading and mathematics. Currently, they are extending their work through the middle grades.

It is clear from interviews with the team principal who established the ungraded program that its development was made possible by the

support of the team to his efforts and the release time made available to him by having the principal in charge of administration performing tasks for all five schools.

Administrative Decisions

It has become increasingly clear that the major advantage of the team project has been in the area of resolving administrative problems. The mutual support and interaction has allowed the principals to center on some very real problems and arrive at ways of resolving them. For example, the team performed an analysis of each school's staff in an attempt to balance the school in terms of staff competencies. They have interviewed as a group and have hired for each of the schools, based on the requirements of all five schools as a group. For example, strong candidates have been placed in schools with the greatest need. The list of teachers who requested inter-district transfers were similarly reviewed. It is interesting to note that most of the requests for transfers of strong teachers in the district have been to team schools. Clearly, this group of team principals has been perceived by teachers as being composed of desirable administrators who operate schools which are considered good places to work.

Below is a condensed list of activities covered in this area.

1. Building and grounds planning with particular emphasis upon playground area allocation was discussed.
2. Arrangements were made with the team librarian to establish uniform library procedures, including the method by which the team schools would discard books.
3. Arrangements were made for teacher interviews and appointments for the following year with first consideration given to intra-team transfers to fill appropriate needs in particular schools.

4. A new method of store orders for the team was discussed which was arranged between one of the team members and the central office.
5. A schedule was planned for attending the California Association of Supervision and Curriculum Development Convention. An agenda was prepared outlining the program, concerning meetings relevant to team ideas that each team member would attend. The team attended the conference.
6. A modern photocopy machine was installed on a trial basis in one of the team schools to test its efficiency as compared to other duplicating machines used in the past. After a considerable trial period, it was decided that the particular machine would not be a wise investment.
7. A tour of the new Stanford Linear Accelerator was planned as a joint excursion for the faculty members of the team schools.
8. Plans were made to emphasize many religions and cultural heritage during the holiday seasons rather than one religion.
9. Clarification of the district policy concerning lengthy teacher absences was obtained.
10. The health services reorganization was presented and implications were discussed.
11. In response to a team representative, the superintendent added to the City School Liaison Committee agenda the problem of availability of city services to outside-city schools.
12. Building plans for the next five years which were presented by the school board were disclosed. The effect the planning would have upon the team was summarized and plans to discuss them with board representatives were made.
13. A new approach to orientation meetings and parent conferences utilizing behavioral measures (primarily the Anastasiow socioeconomic strata figures) was reported.
14. A Parent Teacher Association meeting plan concerning Family Life Education was described.
15. Clarification of the entire master plan of the school district was given during a meeting of the team by a representative from the central office.
16. Three members of the team submitted their names to the director of personnel to be considered for service in the selection committee for new staffs.

17. Plans were made to absorb three teachers from a school closing in the fall.
18. Summaries disclosing facts pertaining to truancy, suspension, and pupil expulsion, as well as thefts, vandalism, and safety inspections, were presented by the team. Appropriate action to alleviate the problems of each case in these areas was decided upon.
19. A meeting was held with a member of the central office to discuss what innovative curriculum programs are emphasized in the five team schools.
20. Clarification was obtained, through discussion among the team members, of what the district bond issue would mean to elementary school teachers.
21. A new proposal, outlined by the superintendent's cabinet, which would possibly refocus elementary education in Palo Alto, was presented to the team. Members studied the effect this would have upon their team with particular emphasis upon improving curriculum programs.
22. Two of the team schools decided to begin an experimental program using data processing equipment to print attendance rosters, more detailed test information, etc.
23. The team jointly decided upon a list of possible consultants for their schools and sent the suggestions to the Elementary Education Committee.
24. One of the participating schools needed a teacher, who was then provided from another of the team schools.
25. Faculty members of the team schools expressed increasing desire to become involved in the team project. Plans were made for member principals to visit other schools during noon time so they could become available for representative conferences, and more involved in team school faculty meetings in other than their home schools.
26. Common usage of curriculum aids, such as globes and map facilities, was discussed, decided upon, and orders for these aids were placed.
27. Through discussion with a representative from the central office, the relationship of the team activities to the new school complex system in Palo Alto was clarified.

28. Proposals and planning for team schools were aided by the use of data obtained from socio-economic strata reports presented to the team by the Director of Research.
29. One of the team members developed a questionnaire to be used by the entire team to ascertain professional information from student teachers coming into the project schools.
30. The team discussed the results of meetings held by its principal-administrator with the staffs from each of the participating schools. The concerns mentioned by teachers about the relationship between the team staffs and the principal specialists led to the consideration of the following recommendations:
 - a. Teachers felt that it would benefit them if common problems of teaching were discussed among their professional peers. They suggested that team-teacher meetings could be held centered around particular curriculum programs. The teachers also felt these meetings would serve as a common basis for development of esprit de corps which they felt was a necessary element of a project as large and important as this.
 - b. Teachers felt they benefited from the casual noon and coffee time interaction afforded by principals spontaneously going to the various schools. The teachers expressed a desire to know the principals better in order that they be less reluctant to call on them with their problems. It was suggested that principals actively seek teachers who are trying new programs and help spread these new ideas to other team staffs.
 - c. Teachers also expressed a desire to facilitate sharing of instructional techniques among team staffs. They suggested that common grade level teachers within one team school be allowed to take charge of a second classroom upon request for a limited time. This would make it possible for the released teachers to visit other classrooms of the same grade level at other schools.
31. The coordination of joint stores orders for the team schools was continued. It was noted that some individual orders for separate materials were ordered but not delivered. A refinement of the ordering system was developed. Sharing certain needed items among schools played an important role in exemplifying team coordination.

32. The principals discussed the plans which were made for the operation of the team principal program next year. Principal vacancies on the team occurred and plans for replacing the team members were considered.
33. The effectiveness and operation over the past year of the Learning Assistance Program for children with learning difficulties was questioned. New plans were made to meet with appropriate central office personnel to solve problems as they arose.
34. The team discussed next year's budgets. Among the items were possible salary increases for teachers and certificated personnel, increases in educational supplies and the salary for the additional secretarial time (two hours daily) allowed for the team.
35. Names of tutors for children with special problems were considered. This was in response to parents who requested help in finding appropriate tutors.
36. The team planned to raise the problem of revitalizing the district's school safety patrol program at the next pupil personnel meeting.
37. The team reviewed the efforts of the City-School Liaison Committee in reaction to the dissatisfaction expressed by the Board of Education concerning city-school relations.
38. It was decided that each school should work out procedures for scoring tests, as the previous plan for scoring all team tests together was not deemed successful.

Curriculum Decisions

Many of the administrative decisions dealt with curriculum areas; however, we have attempted to separate the two areas whenever possible.

The list below shows the wide breadth of issues covered and each principal's involvement in the total concerns for his and the other team schools. The impact has had a wide effect on both the project schools and the total district. For example, when the district decided to allocate one school psychologist and remedial teacher to every two elementary schools, the guidelines were only partially developed. Team action on

this problem resulted in a plan that was eventually adopted as the district's model. A similar influence can be seen in the adoption of the ungraded program in non-team schools in the district. The team principal who developed the ungraded program within this district has been used by other than team staffs in discussing and planning the program for their schools.

Below is a list of the issues discussed and decisions made in the curriculum area.

1. Discussions were held with special consultants with particular emphasis upon the following areas:
 - a. Foreign Language
 - b. Science
 - c. Math
 - d. Music
 - e. Reading
 - f. Language Arts
2. The team was asked by the assistant superintendents in charge of elementary schools to deal with decision making for the entire school district's curriculum program for the school year 1965-66.
3. A schedule was prepared for the music teacher specialists.
4. Plans for a special art committee to serve the team schools were made.
5. An initial discussion of a Family Life Program was introduced on October 15, 1965. This program became one of the major curriculum projects of the team and was responsible for the expenditure of much of the team's time and effort. The planning of this Family Life Program went through the stages of
 - a) encouragement from the superintendent's cabinet, b) formation of a Family Life committee, c) presentation of the outline of the program to teachers, parents and students and, finally, d) program scheduling. The working program is in effect, and at the last reported team meeting the progress and necessary alterations to make the program most effective were being discussed.

6. A meeting was held with the newly appointed superintendent of curriculum to establish guidelines for curriculum improvement.
7. Continuous reports were given throughout the year by each of the team members on the progress of the programs in their special areas. Of notable concern were the following programs:
 - a. Instrumental Music
 - b. Individualized Reading
 - c. Physical Education
 - d. SMSG Math
 - e. Curriculum for Exceptional Children
 - f. Creative Dance
 - g. Learning Assistance
 - h. Social Studies (a subcommittee)
8. Workshops were set up by individual team members to offer a greater understanding of the new methods and techniques they were incorporating into their programs.
 - a. New Math workshop for parents
 - b. Art for primary teachers
 - c. Individualized Reading for primary teachers
9. Some team members were chairmen of the district-wide subject area committees. These principals held a meeting with the central staff which helped clarify and define the relationship of their committees to the team and the district as a whole.
10. The team invited secondary school drama departments to provide programs which would be appropriate to primary grades.
11. Since the team decided to have consultants common to all five schools in the team project, they jointly recommended certain personnel to serve in these consulting capacities:
 - a. Vocal and Instrumental Music
 - b. Spanish

- c. Speech
 - d. Nurse
 - e. Library
 - f. Psychologists
 - g. Learning Assistants
12. The team organized an educational field trip to a historic mission for classes from each of the five schools where early California history is taught.
 13. Team members encouraged their teachers to apply for advanced work in Spanish at the University of Guadalajara summer session. Part of the expense is paid by the district.
 14. The team principal responsible for mathematics met with teachers to discuss the newly adopted mathematics program and the materials and texts to be used for instruction.
 15. Extensive discussions and plans concerning further developments of the Family Life Program led to the following proposals:
 - a. Teachers will be encouraged to express the kinds of problems in family life that confront them in teaching.
 - b. Because the program is a broad one complicated by personal attitudes, the team decided against a formal set of objectives. The program is to be oriented toward the issues, problems and anxieties of teachers and youngsters.
 - c. A preview meeting for parents of all five team schools was scheduled to introduce the Family Life Program.
 16. The Instrumental Music Program and other music program schedules, including dance presentations, were discussed.
 17. Physical Fitness tests were experimentally proven to be an effective evaluation measure of the team school physical education program.
 18. A report was given to the team by the principal who developed a "Dolls for Democracy" program which focuses on the inter-relationship of children and their ethnic, religious and other differences and commonalities.

A major finding in the curriculum area has caused the project directors to revise their original thinking about the team as proposed. It was hoped that sharing administrative tasks and acting in one or two curriculum areas would release the principal to spend more time in the individual classroom and devote more time to curriculum areas in general. We had thought that the principal could act in the role of consultant, providing individual help to teachers. We find that their curriculum specialties did provide an asset to the individual principals and to the team. Their shared competencies in curriculum subject matter has done much to provide the team schools with a vast storehouse of knowledge beyond the grasp of a single principal. They can speak with authority on a number of current issues. However, the benefit of the principal's specialized knowledge is largely available to the other team members, i.e., they are brought up to date by the team specialist, and through them, indirectly, to the teachers in the team schools. They have relieved their team members from attending in-service meetings in other than one or two areas of their specialties. It has not been possible for each team principal to meet with, observe, and confer with many teachers in the five schools about classroom instruction. Even though classroom demonstrations have been provided, as well as individual classroom visitations, the amount of time we thought they would have available for classroom visitations in other schools has been an unrealistic goal of the original proposal.

Further, the specialist principal does not have the necessary time for follow-up with individual teachers that a consultant may have. A consultant working with a larger number of teachers can provide services and follow-up consultations, whereas the principal is continually pulled back to administrative and general school demands.

Another facet of this problem is fear on the part of some teachers that the specialist principal may be evaluating at the same time he is

assisting them. The principal role has an evaluative function, whereas the consultant role usually does not. Teachers are somewhat hesitant to express their inadequacies to a principal who may share in the annual rating or recommendations for future employment.

The Teachers

Teacher Questionnaire. Several teachers were interviewed at the end of the first year. The results of these interviews were discussed earlier (p. 25). At the end of two-and-a-half years of operation the questionnaire below was administered to the teachers.

In your opinion:	Percent		
	Yes	Same	No
1. Is your principal more knowledgeable (specialist) in one or two curriculum areas or administration than			
a. he was before?	48	28	24
b. other principals you have worked with?	74	2	24
2. Is your principal more involved in instruction responsibilities than			
a. he was before?	57	2	14
b. other principals you have worked with?	69	10	21
3. Has the help you requested in curriculum areas improved in quality?	46	26	28
4. Has the help you received in curriculum areas improved in quantity or frequency?	40	28	32
5. Has more than your own principal been available for help in your building?	96	2	2
6. Has the design of the project demanded too much time of your principal outside of your building?	39	12	48

In your opinion:	Percent		
	Yes	Same	No
7. Due to the project, have the routine administrative procedures in your school been more involved in red tape?	24	21	55
8. Have you felt free to ask for help from other principals in the team?	96	--	4
	Positively Affected	Same	Negatively Affected
9. Due to this project, the morale in your building has been	32	58	10
10. Due to this project, the discussion of curriculum problems has been	31	62	7

As noted for all questions, the responses indicate that teachers feel an improved situation due to the team. In many cases, answers show statistically significant differences. The one question to which the teachers responded with almost as many negative responses as positive was number 6, which concerned the amount of time the principal is out of the building. The school staff of the principal in charge of team administration felt his team participation has taken too much of his time. As mentioned earlier in this report, an analysis of the time he spent out of the building revealed that most of this time was for district committees rather than team activities.

The comments teachers made concerning how the project may be improved indicated desire for more teacher involvement in decisions about the project and concern that the principal couldn't be as effective as a consultant. Several teachers commented that the plan appeared to aid the principal in the general support he received from his team members through their assuming curriculum responsibilities and aiding

in making administrative decisions. Teachers felt this aspect of the plan was very desirable. In addition, it was also stated that it might be too much to expect every teacher to have personal contact with every team member.

In general these comments agree with the findings reported above.

The Principals

The major source of data concerning the project principals has been the minutes and notes kept of the team meetings. An analysis has been made of these records by the project directors and research assistants. In addition, Halpin's (1957) Leadership Behavior Description Questionnaire (LBDQ) and Halpin and Croft's (1963) Organizational Climate Description Questionnaire (OCDQ) and Gough and Heilburn's (1963) Adjective Check List were administered. The results are reported below.

LBDQ

The principals and a group of five control principals were rated on the LBDQ, before and after the project started, by their staffs and the assistant superintendent in charge of elementary schools. The instrument yields two scales, Initiating Structure and Consideration.

Halpin (1957, p. 2) writes that the

"Initiating Structure refers to the leader's behavior in delineating the relationship between himself and the members of his group, and in endeavoring to establish well-defined patterns of organization, channels of communication, and ways of getting the job done. Consideration refers to behaviors indicative of friendship, mutual trust, respect, and warmth in the relationship between the leader and members of the group."

Each principal was asked to rate himself. In addition, the entire central staff and the team and control group principals were asked to fill out the scale as they would perceive the "ideal principal." The results, shown in Tables 1 and 2, are presented for descriptive reasons only due to the fact that the number of cases is too small for statistical analysis.

Table 1
IDEAL RATINGS OF TEACHERS
AND CENTRAL STAFF ADMINISTRATORS

	<u>Initiating Structure</u>	<u>Consideration</u>
Teacher Mean Score	41.6	49.4
Consultant	46	48
Central Staff 1	44	48
Central Staff 2	52	49
Central Staff 3	46	48
Central Staff 4	46	49
Central Staff 5	44	47
Central Staff 6	45	45

Halpin reports the mean score of a sample of sixty-four school administrators is 37.9 for Initiating Structure and 44.7 for Consideration. The mean of our sample of ten elementary principals is 37.8 on Initiating Structure and 45.5 for the Consideration scale. Our results are very similar to Halpin's. Interestingly, the mean score for an ideal principal as rated by a random sample of teachers is 41.6 on the Initiating Structure and 49.4 on the Consideration scale. Thus, teachers rate the ideal as being both more authority oriented and warmer than Palo Alto principals or Halpin's sample rate themselves, particularly on the warmth dimension.

Table 2

LBDQ AS RATED BY TEACHERS, PRINCIPALS, AND CENTRAL STAFF											
FALL					SPRING						
Prin- cipal	Tchr	Prin- cipal	Central Staff	Tchr	Principal	Central Staff					
Initiating Structure											
					1st Year	2nd Year	1	2	3	4	5
1	34	29	39	37	45	--	--	--	--	--	--
2	37	37	44	42	38	36	48	48	42	45	48
3	33	22	45	39	37	34	40	51	41	42	51
4	40	41	38	39	44	40	41	47	44	39	47
5	36	38	42	37	35	35	36	36	36	38	36
6	30	32	31	--	--	36	36	40	39	37	40
Consideration											
1	42	45	41	43	45	41	--	--	--	--	--
2	45	36	37	48	42	45	34	51	47	50	51
3	42	41	43	46	48	50	41	47	44	40	47
4	45	45	35	43	48	51	33	47	40	40	47
5	48	48	48	46	47	46	38	46	42	41	46
6	45	45	45	--	--	--	43	43	46	43	43

It is interesting to note in the table, that principals and teachers, for the most part, agree in their ratings. Some striking differences, however, are apparent. Principal 2 originally was perceived quite differently by his teachers than he rated himself on both dimensions. At the end he is closer to their perception on Initiating Structure, but he rates himself significantly lower on the Consideration dimension.

Interestingly, the average rating of the ideal principal as perceived by the central staff administrators is almost identical to the teachers' rating: 44 on Initiating Structure and 48 on Consideration.

Little change occurred on the Consideration dimension in either the principals' or teachers' ratings over the first year-and-a-half period. This scale may be reflecting personality traits that are more durable than the administrative behaviors which this project hoped to influence. All principals were rated at the mean or above the mean at the end of the project by the teachers on the Initiating Structure dimension, with principals 1 and 3 making major changes in this area. These data support the notion that the team project assisted some of the principals in developing administrative competencies.

At the end of the second year few differences are noted in how the principals rate themselves on either dimension. Only principal 2 made a major change. He moved toward the mean on Initiating Structure.

At the end of the two-and-a-half year period this gain has been maintained.

Again, the second year Consideration dimension shows few changes in the scores, reflecting a stability of the dimension for these principals. It is our observation that educators, per se, tend toward the positive end of rating scales in rating teachers and/or themselves (Anastasiow, 1966). They avoid negative evaluations and, if forced to do so, will soften the statement by using positive terms. This may be

the reason that principals have difficulty in evaluating teachers and providing for systematic evaluation of their staffs.

All of our team principals are below the teachers' mean of the Ideal Principal on Initiating Structure (41.6) and the six central staff administrators' Ideal on this same dimension (44, 44, 45, 46, 46, 52). The central staff administrators desire principals who will assume more authority and leadership than the principals show by their ratings of themselves or the mean rating of an Ideal Principal (38.0). An elementary curriculum consultant also rates the Ideal Principal at 46 on this same dimension.

Thus, all our principals (team and control) tend to originate and establish patterns of organization at a lower level than teachers, consultants and central staff administrators perceive is necessary for the "Ideal" principal.

Herein, we perceive, lies a major weakness in the application of the role of the elementary principal. The principal trained predominantly as a classroom teacher is not skilled in providing for systematic evaluations of his staff based on actions emanating from him. This, we believe, is clearly indicated in the scores of the Ideal as rated by a random sample of teachers and central staff administrators. The elementary principal fails to provide the structure necessary for his teachers in order to react and plan their behaviors accordingly.

The interviews of the random sample of teachers also reveal that they desire more classroom observation and principal planned conferences which deal with the specifics of the teacher's performance. The teachers and central staff administrators also desire the individual principal to work more closely with their staffs. This is usually expressed as having the principal become more involved in curriculum.

Becoming more involved in curriculum issues does not necessarily insure the review and improvement of the educational situation in individual classrooms.

Perhaps principals have overreacted to the authoritarian model of former days and have tended to lean in what they believe to be a "progressive" direction. However, this leniency is perceived by teachers and central staff administrators as laissez faire. The problem may be typical of our times under the influence of modern child-rearing practices; modern critics such as Gardner point out to parents what may be similarly said to principals — the modern parent fails to realize that love and reasonable authority give the child something against which to rebel and judge his actions. Similarly, reasonable authority provides the teacher with a basis for evaluating his own program. Without it the teacher is threatened and insecure in much the same way as the young child.

The Consideration (or warmth) dimension is clearly fulfilled by the principal as all of them approach or are at the Ideal as rated by teachers (49.4) or the central staff administrators (45, 47, 49, 48, 48, 49) or the elementary consultant (48).

The failure of the elementary principal to provide curriculum leadership may lie in his perceived evaluation of himself as not needing to require as much direction, structure and control as teachers feel they want.

OCDQ

This questionnaire was administered at the end of a year-and-a-half of the project to assess the utility of this instrument as a criterion measure. It was administered in control and team principal schools. Since the time when the decision was made to use the measure,

questions have been raised as to the usefulness of School Profile Scores (Hall, 1966; Andrews, 1965). The project directors decided these data will be used only as descriptive data where major differences exist among the schools.

Several differences exist between the team schools and the control. There is a tendency of the controls to rate the Intimacy scale highly, i.e., the teachers have established close personal friendship relations. There is a tendency for team schools to be high on the Aloofness scale, i.e., organizing and planning principal meetings on a formal basis. The team schools were also significantly lower (each was one standard deviation or more below) in Hindrance, i.e., teachers in these schools were apparently not burdened with routine tasks. In general, the rest of the scores for both team and control schools were near the mean.

One interesting finding, which is intuitively appealing to those of us who have come to know the control and team schools quite well, was the teachers' ratings on the Esprit morale scale. All scores were at the mean or higher, three of them one standard deviation above. However, two of the four with high morale have principals who are highly achievement oriented who work very closely with their teachers. The other two are principals who are very accepting of their teachers, leave them alone, do little to disturb them, and rarely exert pressure for them to self-evaluate the weaknesses in their program. Thus, we find high morale can come in a work-professionally oriented group or a friendly, intimate non-work oriented group. Morale alone may be a very inadequate criterion for the assessment of a principal's effectiveness.

Gough Adjective Check List

Gough's Adjective Check List was administered to each team principal and control principal at the beginning of the project. The

instrument yields scales with a standard score of fifty and a standard deviation of ten, which Gough and Heilburn have described in their manual (1963). We will use their description and report general results for both the team and control groups.

Our two major interests in the Adjective Check List were to develop some notions about the elementary principal in general, and to see if the team project influenced the team principals' rating of themselves. Hence, the instrument was readministered to the team at the end of the two-and-a-half year project. Individual scores will not be listed to protect the identity of the team and control principals. A summary table is provided in the appendix. The term, "statistically significant," is used when the scores are one or more standard deviations above or below the mean of fifty.

Affiliation. Gough and Heilburn (1963, p. 8) describe this scale as follows:

"Definition: to seek and sustain numerous personal friendships.

"The high-scorer is adaptable and anxious to please, but not necessarily because of altruistic motives; i.e., he is ambitious and concerned with position, and may tend to exploit others and his relationships with them in order to gain his ends. The low-scorer is more individualistic and strong-willed, though perhaps not out of inner resourcefulness and independence. He tends to be less trusting, more pessimistic about life, and restless in any situation which intensifies or prolongs his contacts with others."

Eight of the ten team and control principals had scores at the mean or higher (chi square 3.6, $p < .10$), six of the eight were near or one standard deviation above.

We might assume, then, that the elementary principal seeks and sustains numerous personal friendships, but not in an exploitative manner. At the end of the team project, all principals were near the mean or higher, four of the five team principals were near or statistically significantly so. One team principal made a two standard deviation move from low to high. We would suspect his involvement in the team may have influenced his change in ratings, but this is beyond our data.

Lability. Gough and Heilburn (1963, p. 6) describe this scale as follows:

"The high-scoring subject is seen favorably as spontaneous, but unfavorably as excitable, temperamental, restless, nervous and high strung. The psychological equilibrium, the balance of forces, is an uneasy one in this person, and he seems impelled towards change and new experience in an endless flight from his perplexities. The low-scorer is more phlegmatic, routinized, planful and conventional. He reports stricter opinions on right and wrong practices and a greater need for order and regularity. He is described by observers as thorough, organized, steady and unemotional."

Eight of the ten principals are at the mean or higher on this scale (chi square 3.6, $p < 10$), the two lower were team principals. Thus, principals may be characterized as spontaneous, flexible and having assertive individuality. All but one team member fitted these qualities. At the end of two-and-one-half years, three team principals who were previously very high had scores which dropped to the mean. We suspect that the project may have assisted these individuals in maintaining the spontaneity while reducing the excitable, restless quality of their nature.

Defensiveness. Gough and Heilburn (1963, p. 5) describe this scale as follows:

"The higher-scoring person is apt to be self-controlled and resolute in both attitude and behavior, and insistent and even stubborn in seeking his objectives. His persistence is more admirable than attractive. The lower-scoring subject tends to be anxious and apprehensive, critical of himself and others, and given to complaints about his circumstances. He not only has more problems than his peers, but tends to dwell on them and put them at the center of his attention."

Seven of the ten principals were at the mean or higher. At the end of the two-and-one-half year period, only one principal was significantly higher on this scale. Thus, as a group, these principals appear to fall well within the normal range for this dimension.

Personal Adjustment. Gough and Heilburn (1963, p. 7) describe this scale as follows:

"The high-scoring subject is seen as dependable, peaceable, trusting, friendly, practical, loyal, and wholesome. He fits in well, asks for little, treats others with courtesy, and works enterprisingly toward his own goals. He may or may not understand himself psychodynamically, but he nonetheless seems to possess the capacity to 'love and work.'

"The subject low on the personal adjustment scale sees himself as at odds with other people and as moody and dissatisfied. This view is reciprocated by observers, who describe the low scorer as aloof, defensive, anxious, inhibited, worrying, withdrawn, and unfriendly. What appears to begin as a problem in self-definition eventuates as a problem in interpersonal living."

Nine of the ten principals (chi square 6.4, $p < .02$) were at the mean or higher on this scale, seven significantly higher. Thus we may

assume that our principals generally have a positive attitude toward life based on optimism and a readiness to adapt. This is a very comforting finding. One of the original team members was one standard deviation below the mean and moved to the mean during the team experience.

Achievement. Gough and Heilburn (1963, p. 7) describes this scale as follows:

"Definition: To strive to be outstanding in pursuits of socially recognized significance.

"The high-scoring subject on Achievement is usually seen as intelligent and hard-working, but also as involved in his intellectual and other endeavors. He is determined to do well and usually succeeds. His motives are internal and goal-centered rather than competitive, and in his dealings with others he may actually be unduly trusting and optimistic. The low-scoring subject on Achievement is more skeptical, more dubious about the rewards which might come from effort and involvement, and uncertain about risking his labors. He tends also to be somewhat withdrawn and dissatisfied with his current status."

Nine out of the ten principals (chi square 6.4, $p < .02$) were at the mean or higher, seven one standard deviation above. Our sample of principals appear to lead intellectual lives. At the end of this project all of the team principals were at the mean or higher. The one principal who was low made one standard deviation gain.

Self-control. Gough and Heilburn (1963, p. 6) describe this scale as follows:

"High scorers tend to be serious, sober individuals, interested in and responsive to their obligations. They are seen as diligent, practical, and loyal workers. At the same time there may be an element of over-control, too much emphasis on the proper means for attaining

the ends of social living. Thus the highest level of ego integration, involving recognition and sublimation of chaotic and destructive impulse along with the allosocial and life-giving dispositions, may be denied to these individuals.

"At the other end of the scale one seems to find the inadequately socialized person, headstrong, irresponsible, complaining, disorderly, narcissistic, and impulsive. Needless to say, the low-scoring subject tends to be described in unflattering terms, even including such words as obnoxious, autocratic, and thankless."

Nine out of the ten principals (chi square 6.4, $p < .02$) were at the mean or higher, and all five of the team maintained this position throughout the two-and-one-half years. It would appear that these qualities of serious sobriety, responsibility, and interest are necessary for the role of principal.

Self-confidence. Gough and Heilburn (1963, p. 6) describe this scale as follows:

"The high-scorer is assertive, affiliative, outgoing, persistent, an actionist. He wants to get things done, and is impatient with people or things standing in his way. He is concerned about creating a good impression, and is not above cutting a few corners to achieve this objective. He makes a distinct impression on others, who see him as forceful, self-confident, determined, ambitious, and opportunistic.

The low-scoring person is a much less effective person in the everyday sense of the word — he has difficulty in mobilizing himself and taking action, preferring inaction and contemplation. Others see him as unassuming, forgetful, mild, preoccupied, reserved, and retiring."

Eight of the ten principals were at the mean or higher (chi square 3.6, $p < .10$). Following the team experience the two low members

moved to the mean. Thus, most of the principals fall within a desirable range of positive self concept.

We may assume that the team project assisted the two low individuals in improving their perceptions of the self.

Succorance. Gough and Heilburn (1963, p. 9) describe this scale as follows:

"Definition: to solicit sympathy, affection, or emotional support from others.

"The high-scorer is dependent on others, seeks support, and expects to find it. The low-scorer, on the contrary, is independent, resourceful, and self-sufficient, but at the same time prudent and circumspect. He has a sort of quiet confidence in his own worth and capability."

On this scale, the control and the team principals were clearly different to begin with. Four team principals were at the mean or higher while four control principals were more than one standard deviation below. The independent nature of our low scorers may have been one reason why this group was not selected for the team. The sample differences, however, are too small to support this speculation. Three team principals moved even higher at the end of the project, with two team principals gaining one standard deviation. The supportive situation of the team may have assisted these men in seeking and expecting support from others.

Abasement. Gough and Heilburn (1963, p. 9) describe this scale as follows:

"Definition: to express feelings of inferiority through self-criticism, guilt, or social impotence.

"High-scorer on Abasement are not only submissive and self-effacing, but also appear to have problems of self-acceptance. They see themselves as weak and undeserving, and face the world with anxiety and foreboding. Their behavior is often self-punishing, perhaps in the hope of forestalling criticism and rejection from without. The low-scorer is optimistic, poised, productive, and decisive. Not fearing others, he is alert and responsive to them. His tempo is brisk, his manner confident, and his behavior effective."

Eight of the ten principals are below the mean on this dimension (chi square 3.6, $p < .10$), four significantly so. At the end of the team experience all of the team members were near the mean. The principals appear to fall well within the range of confident and effective behavior as the role of principal would require.

Intracception. Gough and Heilburn (1963, p. 8) describe this scale as follows:

"Definition: to engage in attempts to understand one's own behavior or the behavior of others.

"The high-scorer is reflective and serious as would be expected. He is also capable, conscientious, and knowledgeable. His intellectual talents are excellent, and he derives pleasure from their exercise. The low-scorer may also have talent, but he tends toward intemperateness in its use. He is aggressive in manner and quickly becomes bored or impatient with any situation where direct action is not possible. He is a doer, not a thinker."

Nine out of the ten (chi square 6.4, $p < .02$) principals were at the mean or higher, most at one standard deviation above; two were two standard deviations above. This appears to be a very significant finding and one consistent with what is demanded in the role of principal. The

team principal who was low made a two standard deviation gain at the end of the project.

Deference. Gough and Heilburn (1963, p. 9) described this scale as follows:

"Definition: to seek and sustain subordinate roles in relationship with others.

"The individual who scores high is typically conscientious, dependable and persevering. He is self-denying, not so much out of any fear of others or inferiority to them as out of a preference for anonymity and freedom from stress and external demands. He attends modestly to his affairs, seeking little, and yielding always to any reasonable claim by another. The individual with a low score is more energetic, spontaneous, and independent; he likes attention, likes to supervise and direct others, and to express his will. He is also ambitious, and is not above taking advantage of others and coercing them if he can attain a goal in so doing."

Eight of the scores are close to the mean (chi square 3.6, $p < 10$) with one very high score and one very low. The team scores reflect little change over two-and-a-half years. Perhaps our earlier observations of the principals' failure to provide a systematic evaluation of their staffs is confirmed by these data. Our principals appear to balance their deference roles, but perhaps at the expense of what may be necessary to perform fully their leadership roles. Low scores on this scale reflect less active assertive attitude toward supervising than may be needed to perform their instructional leadership role as fully as teachers and central staff administration expect. These data are further support for the earlier findings on the LBDQ.

Change. Gough and Heilburn (1963, p. 9) describe this scale as follows:

"Definition: to seek novelty of experience and avoid routine.

"High-scorers are typically perceptive, alert and spontaneous individuals who comprehend problems and situations rapidly and incisively, and who take pleasure in change and variety. They have confidence in themselves and welcome the challenges to be found in disorder and complexity. A low-scorer seeks stability and continuity in his environment and is apprehensive of ill-defined and risk-involving situations. In temperament he is patient and obliging, concerned about others, but lacking in verve and energy."

The results are mixed in this dimension with five lows, four highs, and one at the mean. Interestingly, four of the five controls are one standard deviation or more above the mean on this dimension. These results may indicate a balance of the team in perceiving change in relation to a specific goal rather than change for the sake of novelty. Such speculations, however, are beyond our data. At the end of two-and-a-half years the team scores were higher in two cases and lower in two cases. No consistent pattern appears to be evident in these scores.

Autonomy. Gough and Heilburn (1963, p. 8) describe this scale as follows:

"Definition: to act independently of others or of social values and expectations.

"The high-scorer is independent and autonomous, but also assertive and self-willed. He tends to be indifferent to the feelings of others and heedless of their preferences when he himself wishes to act. The low-scorer is of a moderate and even subdued disposition. He hesitates to take the initiative, preferring to wait and follow the dictates of others."

Eight of the ten are near the mean (chi square 3.6, $p. < 10$), with one high and one low score. Four of the team principals scored close to the mean before and after, with one team member maintaining a low score. Again, the role demands make it necessary for a principal to act independently of others but not completely. It would appear these data support our earlier observations of the team principal fulfilling this role.

Nurturance. Gough and Heilburn (1963, p. 8) describe this scale as follows:

"Definition: to engage in behaviors which extend material or emotional benefits to others.

"The subject high on this scale is of healthful nurturant disposition, but sometimes too bland and self-disciplined. His dependability and benevolence are worthy qualities, but he may nonetheless be too conventional and solicitous of the other person. The subject scoring low is the opposite, skeptical, clever and acute, but too self-centered and too little attention to the feelings and wishes of others."

All ten principals are at the mean or higher, six one standard deviation above. Thus these principals appear to possess behaviors that extend support to those with whom they work and supervise. This supportive attitude may interfere with evaluations of the staff when areas of weaknesses are observed. We predict that a common failure of principals is to recognize that constructive criticism is as supportive as praise and is more constructive than silence.

Dominance. Gough and Heilburn (1963, p. 7) describe this scale as follows:

"Definition: to seek and sustain leadership roles in groups or to be influential and controlling in individual relationships.

"The high-scorer on this scale is a forceful, strong-willed and persevering individual. He is confident of his ability to do what he wishes and is direct and forthright in his behavior. The low-scorer on dominance is unsure of himself and indifferent to both the demands and the challenges of interpersonal life. He stays out of the limelight, avoids situations calling for choice and decision-making."

Eight of the ten principals (chi square 3.6, $p < 10$) were at the mean, one standard deviation above or higher; four of the team principals were included in this group. Clearly a leadership role requires the kind of individual who seeks and sustains leadership roles as these data support. At the end of the project all five team principals were at the mean or higher, three significantly so. The increased confidence that the team principals report in their interviews may be supported by the scores on this scale.

Counseling Readiness. Gough and Heilburn (1963, p. 9) describe this scale as follows:

"High-scorers are predominantly worried about themselves and ambivalent about their status. They feel left out of things, unable to enjoy life to the full, and unduly anxious. They tend to be preoccupied with their problems and pessimistic about their ability to resolve them constructively. Low-scorers are more or less free of these concerns. They are self-confident, poised, sure of themselves, and outgoing. They seek the company of others, like activity and enjoy life in an uncomplicated way."

The results shown on this scale are mixed; however, four team principals were at the mean and one was significantly higher. At the end of the project, all five principals were below the mean. Three of the control principals were significantly low and two principals were significantly high. The tendency for team principals to have lower

scores at the end of the project is an encouraging sign if the scale adequately measures confident, poised, self-confident attitude.

Mean Differences between the Team and Control

The team principals had combined mean scores that were significantly lower on the dimensions of Change, Lability, and significantly higher on Succorance and Defensiveness than the control principals. This may be purely a reflection of our selection procedures. However, at the end of the project these differences were maintained and strengthened.

Summary: Team Principals

The results of the Adjective Check List indicate that on the whole the principals in this study have very desirable traits, many of them that are intuitively appealing for the role of an elementary administrator.

The changes reflected in the before and after scores following the project indicate movement of the team towards greater Affiliation, moderate Defensiveness, stronger Personal Adjustment, greater Intracception, and higher Nurturance. These gains, while we cannot attribute them directly to the project in a definitive sense, are positive growths which we consider very desirable gains.

The tendency that we have found for these principals to exercise moderate leadership may be indicative of the role conflict of the elementary principal and the amount of control he should exercise in this role. The high scores on Nurturance, lower than desired scores on Autonomy, and the balanced scores on Deference were interpreted as evidence supporting the notion that principals do not supply teachers with sufficient systematic evaluation of their teaching.

Teacher Involvement in In-Service Education

One of our speculations prior to the initiation of the project was that teachers in team schools would become more involved in the district's in-service education meetings than their counterparts in other schools. This hypothesis was based on the notion that principals more directly involved in curriculum would stimulate teacher participation in these efforts. As we have shown earlier in this report, the team principals planned their own in-service meetings for the team schools which were well attended by teachers in the five schools. These activities were not held in the control schools. Thus, our hypothesis receives some support.

In addition, records were kept of the number of in-service meetings attended by teachers of the five team and five control schools. These results are presented in Table 3.

We note that more teachers in team schools returned the questionnaires than teachers in the control schools. The ratio of meetings attended by the number of teachers in team schools to the number of meetings attended is 1:1.2, while for control schools it is 1:1.6. In each group teachers attended more than one meeting; however, the control group average is higher than the team. We suspect that the fact that in-service meetings were held by team principals in team schools may have reduced their teachers' attendance for general district meetings. However, these data, in general, do not support our hypothesis, nor are they definitive enough for our speculations of teacher involvement.

Student Data

We had originally assumed that the increased effectiveness of the principal would be shown in pupil achievement. We still feel this will occur. However, attributing any gain to a single cause is a difficult task when so much is operating within a classroom to effect such a

Table 3
TEACHER QUESTIONNAIRE OF NUMBER OF IN-SERVICE
MEETINGS ATTENDED
9/64 - 2/65

School	Team			Control			
	Grade	Total Responses to Questionnaire	No. of Meetings Attended	Grade	Total Responses to Questionnaire	No. of Meetings Attended	
1	K	0	0	K	1	3	
	1	1	2	1	2	4	
	2	3	2	2	1	2	
	3	2	3	3	0	0	
	4	1	2	4	2	4	
	5	2	2	5	1	0	
	6	1	0	6	1	0	
	10	11		8	13		
2	K	1	2	K	1	3	
	1	2	5	1	2	5	
	2	2	4	2	1	3	
	3	1	1	3	2	2	
	4	2	3	4	2	4	
	5	2	2	5	1	0	
	6	0	0	6	0	0	
	10	17		9	17		
3	K			K	1	3	
	1	2	3	1	2	4	
	2		0	2	1	1	
	3		0	3	1	1	
	4	1	1	4	2	2	
	5	0	0	5	2	2	
	6	1	1	6	0	0	
	4	5		9	13		
4	K	1	1	K	1	3	
	1	2	2	1	2	6	
	2	2	4	2	2	5	
	3	2	2	3	1	2	
	4	2	1	4	0	0	
	5	2	0	5	0	0	
	6	2	2	6	1	0	
	13	12		7	16		
5	K	1	1	K	1	2	
	1	2	7	1	1	1	
	2	0	0	2	2	2	
	3	2	3	3	2	3	
	4	2	6	4	3	5	
	5	1	2	5	2	2	
	6	0	0	6	2	1	
	8	19		13	16		
Total Number of Teachers Responding		45	64			46	75
Total Number of Possible Teacher Response		60				71	
Per Cent		75%				65%	
Ratio		1:1.2				1:1.6	

change. Anastasiow (1966) has shown that the principal can seriously influence students' achievement by his support or lack of support of a program. A principal involved in an elementary Spanish study who did not support that program had students who scored significantly lower statistically ($p < .001$) on Spanish listening comprehension achievement tests, even though the pupils in the non-support school had higher mean scores on the School and College Ability Test. The superior results were in a team school.

To test the above hypothesis further, the Test on Understanding Science (Carrier, Geis, Klopfer, and Shoresman, 1964) and the California Science Attitude Test (Bixler, 1958) were administered to a random selection of sixth graders in the team and control schools. Science was selected because of the active participation in the team schools of the team principal who specialized in science. As mentioned above, the principals have not been as active in all curriculum areas and have only begun in some areas. The results are presented in Table 4.

Table 4
SCIENCE ACHIEVEMENT AND ATTITUDES
IN TEAM AND NON-TEAM SIXTH
GRADE CLASSROOMS

	TOUS		California Science Attitudes Questionnaire	
	$\bar{X}$	σ	$\bar{X}$	σ
Team Boys	19.02	5.05	146.31	56.79
Non-Team Boys	19.19	4.89	133.61	54.81
Team Girls	20.54	4.61	129.66	63.05
Non-Team Girls	19.86	4.79	85.25	44.64

As can be seen by the results, achievement levels of team and non-team schools are very similar. However, the attitudes towards science show superior scores for team boys and girls, with the girl

difference statistically significant at the .001 level. In addition, note that the girl scores are almost as high as the boy scores, a result usually not found when measuring attitudes towards science. Indirectly we find that girls' attitudes towards science may have been positively affected by the team project.

We would hold that achievement gains will be positively affected by the team project and that these results will begin to accrue as the project continues and the specialization of the team members grows in sophistication. However, these data will be difficult to demonstrate in the absence of relevant criterion measures to assess achievement and attitudes without controlling individual teacher effectiveness. In the Spanish study we were able to match teachers in terms of their background in Spanish and the teachers' ability to pronounce Spanish accurately. At our current state of sophistication we cannot similarly match teachers in the academic areas of reading, math and science.

Service Personnel to the Schools

Almost every school district has specialists assigned to carry out functions to assist the classroom teacher in the total educational process. The assignment and case loads of these individuals vary from district to district, but the underlying problem for the principal is the same, i.e., he must coordinate the efforts of the specialists that come into his building.

We decided that in the team project we could do two things to assist the group of principals. One, we could reduce the number of different individuals coming into the team building and, two, we could assign responsibility for the specialists to the various team principals, thereby reducing the number and variety of contacts he must make.

The specialists who serve the Palo Alto schools and their school loads are listed below:

<u>Specialists</u>	<u>Number of Schools Served</u>	<u>Total Number of Elementary Specialists in the District</u>
Speech	4	7
Guidance Consultant	2	11
Librarian	4-5	5
Instrumental Music	5	6
Remedial Teacher	2	15
Spanish Teacher	5	5
Vocal Music	7	3
School Nurse	5	5

A serious attempt was made to reduce the number of individuals serving the team schools. For example, the minimum of speech therapists who could serve the five team schools and still retain the load assigned throughout the district would be two, while the maximum number is five. A glance at the table would give other minimums and maximums.

During the first year it was administratively impossible to maintain the minimum number of different specialists in all areas. Thus, our impressions about the effectiveness of the plan are based on a comparison within the team project as well as observing how the regular assignment of specialists was working in non-team schools.

The principals uniformly report that lowering the number of different service personnel in the team schools has greatly reduced the amount of time spent in coordinating the programs and efforts of these individuals. In addition, the principals report that the programs of these individuals have improved due to the clarity with which the five principals on the team have been able to define the specialists' roles and coordinate a similar program in all the team schools. Each team

principal has assumed responsibility for the specialists of the curriculum area of his strength, thus reducing the number of specialists with whom each team principal has had to work. This has saved a great deal of time. The result of these two actions (reduced number of individuals and a fewer number for each to supervise) has, the principals report, improved the individual programs.

Some of the specialists themselves were interviewed as to their impressions of how the team plan has worked.

In general, they report they have a greater sense of security in the team schools, for they feel they can meet with a principal or the team for support, aid or guidance. In their opinions the support has provided a greater consistency in their programs as they go from school to school. In addition, the availability of at least one principal to listen to and support their practices has given them a sense of improved professional status. Through this interaction they feel they have not only improved their programs, but gained insight concerning their specialties.

One coordinator of the specialists, at the district level, reports that the programs in the team schools have improved more rapidly than in other schools because of the systematic attention the team has given to the project. He feels that often a principal will neglect the specialist, leaving him to do his job in relative isolation. This is not the case with the team.

Another coordinator of a district program at first was threatened by the team actions, fearing that the team would refocus the program in directions other than the one desired by the coordinator. However, after meeting with the team he found that he also had a more direct source in this group to consolidate and improve the effectiveness of his personnel in the team schools, as well as provide guidelines for development of programs in non-team schools.

This concept of reducing the number of different personnel has been a difficult one for some of the central staff administrators to support and implement. They, and individual principals in other than team schools, have misunderstood the intent and suspected that the team was trying to secure the outstanding members of the various departments for work in their schools. Due to this, it has been difficult to implement fully this phase of the project in all areas. However, at this writing all but one of the specialist assignments have been made on a team basis.

One Parent Teacher Association for Five Schools

Originally, we had hoped that one PTA organization could serve the five schools, thereby reducing the number of separate meetings that the team principals would have to attend. We also had hoped that an executive board from the parents of the five schools would meet with the principal in charge of administrative responsibilities planning the year's activities of the organization. This would greatly reduce the number of meetings that the other principals would have to attend during the school day or evenings, thereby releasing him for observation and supervision of teachers.

Unfortunately, little of this concept has been put into action. The principals were reluctant to lose contact with parents in their home schools. They felt the advantages of informally meeting with them, while not necessarily commensurate with the time spent, would be lost in one shared organization.

They did, however, plan group Parent Teacher Association meetings for the five schools which were moderately successful.

SUMMARY AND RECOMMENDATIONS

The Model

It is apparent to all who have read this far that the project has been deemed successful by the project directors, the teachers, and the principals themselves. The goals postulated in the original proposal have been largely attained, and a plan has been put into operation that will allow the principal to grow professionally and in effectiveness, thereby enhancing the educational program.

Interestingly, it would appear that the benefits derived from the teaming of principals (and we would include teaming of teachers) are in the "self-renewal" aspects of the team model. John Gardner's (1965) insightful "Self Renewal" lists five aspects that an individual or a society need provide itself for its own continuous growth. He lists 1) self-development, 2) self-knowledge, 3) courage to fail, 4) respect for others (love), and 5) motivation of the essential element of self-renewal. All these elements are perceived to be present in the team model and each will be discussed below.

Self-Development

The principals report that the excitement of professional interaction has stimulated them to examine closely their professional role as an elementary principal. They have read more, listened more, and have considered seriously their roles in the current avalanche of educational innovation and change. They have felt the need for further academic learning, and pursued this through university and college courses and at professional conferences and meetings. In addition, they have assumed leadership positions on curriculum committees at the local, state, and national levels.

At first, this stimulation resulted in crowded agendas. A barrage of many vital issues was presented and discussed, and the danger of being overwhelmed by this flood of ideas was great. However, they were able to handle this problem by allocating priorities and systematically handling issues they were competent to manage and prepare for the ones about which they needed more information. They grew in professional knowledge and competencies and clearly perceived the need to continue this lifelong learning. They are, as Gardner suggests, exploring a wider range of their potentialities than ever before.

Elementary principals generally have had one or two models after which they pattern their behavior as principals. The decisions they make and actions they take are usually based on the ways of operation they learned as teachers under their former principals. They have modeled their behavior after others rather than developed their own style based on the strengths and weaknesses of their own personality. The result of the team situation, in which five principals work closely together, is that they are compelled to examine the rationale upon which they base major decisions. They have learned from others and, thereby, about themselves. Frequently, during team meetings, a principal will pause and reflect why he would operate in a certain way. The other team members also confront each other with facts about each other, so that it is difficult to "run away from themselves." It would appear to us that they are tentatively exploring the "world within" and finding a fruitful search. The team emotional support for each other is providing a climate for such a search.

Courage to Fail

As Gardner (1965, p. 15) states, an adult " . . . tends increasingly to confine himself to the things he does well and to avoid the things in which he has failed or has never tried."

We perceive the elementary principal as one who develops a style based on his success and does not risk failure in areas where he is not sure. Confronted with the demands to satisfy parents, teachers, the central administration, he is caught in a web of pressures which are not always pushing in the same direction. Although few principals are removed from their jobs, failure possibilities surround him and the threat pushes him to act in the safe areas. Thus, as our original proposal suggests, he becomes enmeshed in the routine administrative tasks of running a smoothly operating school and avoids the supervision-evaluation of teacher and curriculum innovations.

In becoming part of the team project, principals risked failure by joining a major organizational change and continue to risk failure by assertively tackling controversial issues to which they have become committed (Family Life Program, for example). In addition, their willingness to give classroom demonstrations and to lead in-service workshops also makes them very vulnerable to potential failure situations. It is much easier to advise than demonstrate because, as every teacher knows, our knowledge of teaching methodology is of a general nature and does not always work. A teacher's sensitivity to supervision is based on the fact that, on any particular day, the lesson he has so carefully planned may be totally unsuccessful. Few principals take similar risks in providing demonstration lessons.

Love

As Gardner (1965, p. 15) suggests, few of us are "capable of depending upon others and of being depended upon" so that we " . . . can see life through another's eyes and another's heart."

The team situation allows one individual to acquaint himself with the others' personal strengths and weaknesses. In accepting weaknesses and admiring strengths one moves toward acceptance of the other team members in the fullest sense of the word.

Repeatedly, the team principals report to us their growing admiration for the other team members. This mutual respect, as we have said earlier, is broader than a friendship; in fact, social friendships are rare among the team members. The respect appears to us to be related to professional competencies and human qualities that they have come to know through this close interaction.

Motivation

Most of what is reported earlier reflects the energizing of this group of individuals — their curiosity to know more, their efforts to pursue problems deeper, and their efforts to explore their own competencies. The original team members are now moving into new experiences that, hopefully, will further their professional growth. One member has accepted the principalship of an American K-12 school abroad, which will require him to test his skills and learn a whole series of new ones in administering a high school. Another has received a year's leave of absence to explore teaching methodology and academic course work in an experimental program. A third has received a fellowship for training others in the development of the ungraded school and is pursuing his doctorate degree. The two remaining members report that, although they will miss these members, the team project has added significantly to their lives, and that they wish to pursue it with the selection of new individuals.

From what has been reported so far it is not meant to imply that self-renewal can only come in this manner. Other principals have been successful in establishing patterns of growth that would fit this model. However, the team model facilitates this growth and is perceived as one way to encourage, assist and allow the elementary principal to develop into a truly professional role.

In research of this nature one can never tell whether these individuals would have grown in these same ways had they not had this experience. A major problem in evaluating team teaching or ungraded school organization is the fact that the relevant variable is the individual in the team or ungraded situation. The relevant test is to compare one individual as he is now and as he would have become without this experience. Unfortunately, this comparison is impossible. Our principals were strong to begin with and they are, in our judgment, stronger now. Our evidence encourages us to recommend this organization for the renewal of the individual and the institution in which he operates.

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APPENDIX

Mean Scores on the Adjective Check List Sub-Scales

	Team		Control
	1st	2nd	1st
Change	46.0	54.8	55.6
Autonomy	47.4	47.8	48.6
Nurturance	56.4	58.8	57.8
Dominance	61.6	61.2	59.2
Affiliation	55.5	54.8	59.6
Defensiveness	56.2	--	46.0
Personal Adjustment	53.8	55.5	57.4
Achievement	61.2	61.0	58.6
Intracception	61.6	62.5	60.0
Deference	48.8	49.0	48.5
Lability	52.6	50.2	62.0
Self Confidence	58.4	55.2	57.4
Counseling Readiness	47.0	44.0	47.6
Aggression	46.2	47.6	47.6
Self Control	52.6	49.2	53.4
Succorance	47.8	52.5	40.2
Abasement	47.2	49.2	44.4

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